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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
TOSHIHIRO SHOJI : EXAMINER: LAURENCE D. FERGUSON
SERIAL NO: 09/768,178 :
FILED: January 24, 2001 : GROUP ART UNIT: 1774
FOR: ULTRAVIOLET-CURABLE :
COMPOSITON AND :
OPTICAL RECORDING MEDIUM :

DECLARATION UNDER 37 C.F.R. § 1.132

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

I, Toshihiro Shoji, hereby declare as follows:

1. I graduated from Yokohama National University, Graduate School of Engineering, Department of Chemical Engineering, in March 1978. Since November, 1981, I have been employed by Dainippon Ink & Chemicals, Inc. Since April 1990, I have been engaged in research and development on UV curable materials.
2. I am the inventor of the invention as claimed in the above-referenced application, and accordingly, I am familiar with the specification and claims which comprise that application.
3. I am aware of the Official Action of July 2, 2002, issued on the above-referenced application, in which Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; and further claims 1 to 4 are rejected under 35 U.S.C. 103(a) as being obvious over Suzuki et al. (U.S. 5,573,831); and further, claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1058250.

PURPOSE, METHOD AND RESULTS

(1) Purpose of the Experiments:

The purpose of the Experiments of this declaration is to confirm if the ultraviolet-curable compositions used in the Examples and the Comparative Examples of EP 1058250 (WO99/34361) and the ultraviolet-curable composition used in Example 2 of U.S. Patent No. 5,573,831 are inside or outside the range of claims 5 of the present application.

(2) Method and Results of Experiments:

i) Preparation of the composition of Example 2 of U.S. 5,573,831:

(a) Urethane acrylate (trade name: UA-4200; manufactured by Shin-Nakamura Chemical Co., Ltd.) 40 g

(b) Trimethylolpropane triacrylate (trade name: TMP3A; manufactured by Osaka Organic Chemical Industry Ltd.) 30 g

(c) N-vinyl-2-pyrrolidone (trade name: NV2P; manufactured by International Specialty Products (Japan) Ltd.) 25 g

(d) Photopolymerization initiator (trade name: IRGACURE-184; manufactured by Ciba Specialty Chemicals Inc.) 8 g

The above compounds were mixed in a 200 ml SUS beaker, and then heated and dissolved on a 65°C hotplate. After the dissolution, the following material (e) was added thereto and subjected to a supersonic and mechanical treatment, resulting in a uniformly dispersed composition.

(e) Synthetic silica (trade name: TOKUSIL GU; manufactured by Tokuyama Corp) 20.6 g

ii) Each of 0.5g of the compositions was weighed and charged into a 100 ml polyethylene beaker, then 49.5 g of methanol, reagent chemicals pure grade, manufactured by Kanto Chemical Co., Inc., was added thereto, and thereafter, shaken and stirred until a uniform condition was obtained.

iii) A type 6155 pH complex electrode was connected to a pH meter (trade name: COM-8; manufactured by Denki Kagaku Keiki Co. Ltd.), and immersed into a 1 wt % methanol solution prepared as above in ii), and left to stand until a constant pH was obtained. The thus obtained value was rounded to the second decimal place. The temperature of the solution was adjusted to be within a range of $25 \pm 2^\circ\text{C}$.

iv) Results of the pH determination of 1 wt% methanol solution of the

compositions:

Patent describing composition	Name of Composition	pH
EP 1058250 (WO99/34361)	DAICURE CLEAR SD-318	3.2
	DAICURE CLEAR SD-211	2.7
	DAICURE CLEAR SD-17	3.8
	DAICURE CLEAR SD-2200	2.9
U.S. Pat. No. 5,573,831	Comp. of Example 2	8.2

v) Conclusion

From the above experiments, and since MD-341 could not be obtained, it is believed that the cited references U.S. Pat. No. 5,573,831 and EP 1058250 (WO99/34361) do not show or suggest the ultraviolet-curable composition of the present application (U. S. S. N. 09/768,178) which has a pH of 4.5 to 6.8.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: *November 11, 2002*

Toshihiro Shoji

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